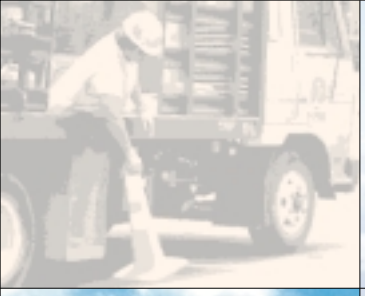


H1 CORRIDOR

CONSTRUCTION 2000-2001

On the Inside

CONSTRUCTION PROJECTS

SEISMIC RETROFITTING

LIGHTING UPGRADES

RESURFACING

Cover Photo by Air Survey Hawaii

A MESSAGE FROM THE DIRECTOR

The H-1 Freeway from Punchbowl to Kahala was the first major freeway built on Oahu and in the State of Hawaii. It is not only one of our oldest major roadways, but is also one of the most heavily traveled running through the heart of Honolulu.

It has been 15 years since we did any major work in the H-1 Corridor and heavy maintenance and upgrades are sorely needed. That's why your state Department of Transportation (DOT) is carrying out nine major maintenance and construction projects along the H-1 Corridor from Punchbowl Street to West Hind Drive.

These projects include resurfacing, reinforcing freeway support columns to bring them up to current federal earthquake standards, replacing aging water lines, new bicycle lanes, highway lighting, ADA improvements and building an additional lane for the Punahou off-ramp.

The work will continue through 2002 and will help make this thoroughfare safer for the 182,000 commuters who utilize it daily. It will also help us comply with federal highway safety standards. Approximately $58 million will be spent on these improvements.

You will find a complete description of the work on pages 4-5 of this insert.

We realize that there is no good time to do roadwork, much less work on the H-1 Freeway in the heavily traveled downtown area. Although we prefer to do the work at night when the roads are less busy, we face the additional challenge of working in a corridor with homes fronting the freeway on both sides.

We have prepared a cost comparison of doing the roadwork during the day versus at night based on anticipated delays to motorists and user costs. The results show that performing the work during the standard daytime lane closure hours of 9 a.m.-3 p.m. through the H-1 Corridor, from Punchbowl Street to Kapiolani Interchange, would cost approximately $432,900 and up to 1 1/2 hours per day in delays to motorists. Therefore, we will be doing most of the H-1 resurfacing at night.

The DOT has initiated a comprehensive communications plan to notify the public ahead of time about the scheduling of roadwork. This newspaper insert is one of several ways the DOT will inform commuters about the progress of these projects. During the work we will operate an H-1 Hotline, answer questions and provide regular information about the construction schedule. The DOT's web site www.state.hi.us/dot will assist with the dissemination of important information about the construction project.

Ultimately, our goal is to provide enough information to minimize confusion during construction. We hope the information in this tabloid will begin the process of communication between the DOT and commuters. If you have any questions, please don't hesitate to call our Public Affairs Office at 587-2160.

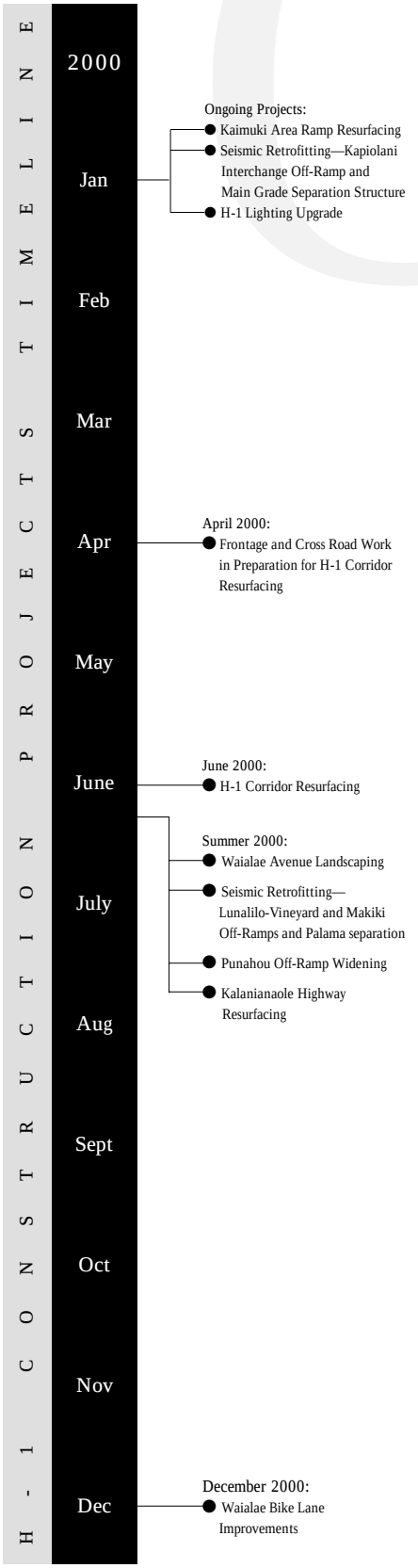
Mahalo,

Kazu Hayashida
Director of Transportation

HELP KAZU NAME THE
H-1 CONSTRUCTION MASCOT!

Kazu needs your help to name the H-1 construction coneman (or conewoman) mascot. Listen to KSSK's Perry and Price in the morning throughout April for updates on how you can win a free trip just for coming up with the winning name. Finalists can also win fabulous prizes. Winners will be announced in May.

Send your suggestions to
"Name the H-1 Mascot"
Hawaii State Department of Transportation
869 Punchbowl St., Honolulu, HI 96813;
or e-mail h-1corridor@exec.state.hi.us
Deadline is April 30, 2000



When will construction along the H-1 Corridor begin?

A few projects along the H-1 Corridor have already been completed, such as the resurfacing of six on- and off-ramps in the Kaimuki area. Construction on the ramps, frontage roads and cross streets along H-1, such as installation of a new water line on Bingham, will begin April 10. The contractor is currently working on the construction schedule. Most other projects are scheduled to begin this summer or are still in the bidding process, and a more detailed timeline will be provided when all the projects are awarded to contractors. For detailed descriptions of the nine major H-1 projects, see pages 4-5 of this insert.

How will H-1 Corridor construction affect traffic?

Motorists should expect traffic delays, as would be the case with any major highway construction. However, by working mostly at night the impact should be less.

Why is the state doing these projects now and all at one time?

Maintenance and upgrades, some of which are necessary to bring H-1 up to federal standards, are sorely needed. Also, the state has coordinated construction projects with the utility companies, and they will schedule their own maintenance and upgrades to coincide with our H-1 Corridor timeline. As a result, all work will be completed within two years, rather than the projected 10 years if the projects were independently scheduled.

When was the last time the H-1 Corridor was resurfaced?

It has been 15 years since any major work was performed along the H-1 Corridor.

Is the state working with the City & County of Honolulu and utility companies to coordinate projects?

The state Department of Transportation is coordinating with the City, the Board of Water Supply, HECO, Oceanic Cablevision and the Gas Company to ensure that projects are performed in a sequence that doesn't waste taxpayers' money or leave motorists without alternative routes. For example, the Board of Water supply scheduled installation of water mains in the Kaimuki and Waialae areas to take place just before resurfacing. By doing so, portions of the newly resurfaced highway will not be needlessly torn up for the installations.

In addition, the state issued an announcement that no new permits will be awarded for construction along the H-1 Corridor for the period of highway work to keep alternative routes from being closed by unrelated construction.

Why do Hawaii highways need seismic retrofitting?

During an earthquake the ground shakes violently. This back-and-forth motion can cause a highway overpass to shift off its foundation, resulting in major structural damage and even a total collapse, as California highways experienced in 1994.
New federal construction standards require that all state highways meet earthquake safety guidelines. Through seismic retrofitting, H-1 will be made compliant.

Why can't the state give exact completion dates for H-1 projects at this time?

The DOT has established a comprehensive communications plan to provide the public with as much information as possible and as early as possible. This newspaper insert provides the public with information on H-1 Corridor construction even before some of the projects have been awarded to contractors. Because of this early notice, construction timelines have not been finalized. As projects are awarded, and contractors finalize their construction schedules, the state will relay updates through subsequent newspaper inserts, television and radio spots, and the DOT web site at www.state.hi.us/dot.

How often will the state publish this tabloid?

When each new phase of work begins.

Who can I call for more information?

The DOT will operate an H-1 Hotline, where you may get questions answered and information about the construction project. In the meantime, call the DOT Public Affairs Office at 587-2160.

What's the difference between state and city roadways?

Hawaii's highways fall under the jurisdiction of the state, while the counties control most other roads. The DOT will work with the City and County of Honolulu to coordinate construction projects so that drivers have alternate routes during construction.

H-1 CORRIDOR RESURFACING

Estimated Start: Initial work on frontage roads and cross streets will begin on April 10, with resurfacing to follow.

Estimated Completion: Fall 2001

The H-1 Corridor will be resurfaced from the Punchbowl Street off-ramp to Kapiolani Interchange, including all on- and off-ramps, frontage roads and cross streets. Prior to resurfacing, daytime work will be performed from 9 a.m to 3 p.m. for water line installation on Bingham Street, from Punahou to Isenberg Streets. This work will begin from McCully to Isenberg Streets, and then proceed from McCully to Punahou Streets. The state will close one block at a time on Bingham Street throughout a five-month period. Local traffic will be allowed. Resurfacing will follow in June.

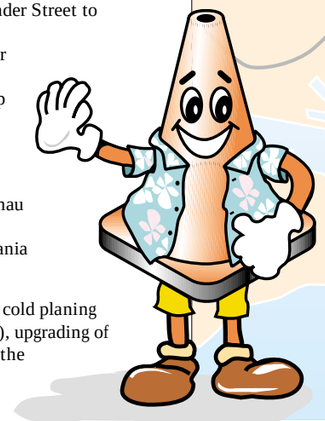
Eastbound H-1 Ramps to be resurfaced:
- Ward Avenue on-ramp
- Piikoi Street on-ramp
- Bingham Street off-ramp
- University Avenue on- and off-ramps
- Kapiolani Boulevard on-ramp

Westbound H-1 Ramps to be resurfaced:
- Lunalilo Street on- and off- ramps
- Punahou Street on-ramp
- Alexander Street on-ramp
- Wilder Avenue off-ramp
- University Avenue on- and off-ramps
- Old Waialae Road on-ramp
- Kapiolani Boulevard off-ramp

Frontage Roads:
- Bingham Street from Punahou Street to east of Isenberg Street
- Lunalilo Street from Ernest Street, including Pensacola and Piikoi Streets beneath the Piikoi viaduct
- Metcalf Street from Alexander Street to Dole Street
- Wilder Avenue from Wilder Avenue off-ramp to University Avenue on-ramp

Cross Streets:
- Ward Avenue from Kinau Street to Lunalilo Street
- Keeaumoku Street from Kinau Street to Kaihee Street
- McCully Street from Beretania Street to Dole Street

Resurfacing work will include cold planing (removal of existing surfacing), upgrading of bridge railings and guardrails; the reconstruction of weakened pavement, curbs, gutters, curb ramps, sidewalks and drainage structures; and modifications to highway lighting, the traffic signal system and Punahou Pump Station. In addition, highway signs and reflectors will be replaced, repairs will be made to bridge decks and chain link fences and water lines will be upgraded.



PUNAHOU OFF-RAMP WIDENING

Estimated Start: Project will go out to bid shortly; estimated start Summer 2000.

Estimated Completion: To be determined

The Punahou Street off-ramp on the H-1 Corridor will be widened from one lane to two lanes, and include an additional right-turn lane onto Punahou Street. The off-ramp will be repaved. Work will include the upgrading of signs, utilities, underdrains, lighting, curb ramps, signals, pavement markings, and guardrails. Pavement reconstruction will require a 24-hour ramp lane closure of one lane for approximately three months.

KALANIANAOLE HIGHWAY RESURFACING

Estimated Start: Summer 2000

Estimated Completion: To be determined

Resurfacing is scheduled on Kalanianaole Highway from Ainakoa Avenue to West Hind Drive. Prior to resurfacing, two new water mains will be installed for the Board of Water Supply: an 8-inch water main from Ainakoa Avenue to Laukahi Street, and a 16-inch water main from Laukahi Street to West Hind Drive; and a possible new gas line from Ainakoa Avenue to West Hind Drive. Work will include cold planing, reconstruction of weakened pavement and sidewalk areas, construction of bike lanes and curb ramps, improvements to guardrails and drainage, new signs and pavement markings. The DOT is awaiting design plans from the Board of Water Supply and Gasco on the 16-inch water main and gas line.

H-1 LIGHTING UPGRADE

Estimated Start: Ongoing

Estimated Completion: Summer 2000

From Keeaumoku Street Overpass to Ainakoa Avenue, new aluminum poles and high-pressure sodium lights will replace the present lighting systems. The contractor will close one lane in each direction from 9 p.m. to 5 a.m. between Punchbowl and Punahou Streets beginning April 2.

BIKE LANE IMPROVEMENTS

Estimated Start: In design; estimated start December 2000

Estimated Completion: Fall 2001

Shoulder improvements are scheduled for bicycle lanes along Waialae Avenue, from Kealaolu Avenue to Kalanianaole Highway and 17th Avenue to 21st Avenue. Work will include resurfacing, cold planing, improvements to bike lanes, shoulders and drainage, upgrading of railings at the pedestrian overpass, new curb ramps and pavement markings, the installation of traffic signals and modifications to lane patterns in eastbound and westbound directions.

KAIMUKI AREA RAMP RESURFACING

Estimated Start: In progress

Estimated Completion: April 2000

Six ramps in the Kaimuki area were resurfaced. These included the 5th, 11th and Waialae Avenue on-ramps and the 6th, Koko Head and Waialae Avenue off-ramps. In April, lane and ramp closures will be put in place between 8:30 a.m. and 3:30 p.m. to complete work on overhead signage, lighting and guardrails. During these times, daytime left lane closures will occur on the 6th and Koko Head Avenue off-ramps, and ramp closures will occur on 5th, 11th and Waialae Avenues.

SEISMIC RETROFITTING

(Kapiolani Interchange off-ramp and main grade separation structure)

Estimated Start: In progress.

Estimated Completion: Summer 2000.

The state is currently retrofitting the H-1 bridge superstructure from South King Street to 1st Avenue. Substructure work area on the underside of the bridges that pass over Harding Avenue, Kapiolani Boulevard, and the city yard are also ongoing. Lanes will be closed on Harding Avenue to facilitate concrete pouring and construction over the roadway. Work on H-1 near the King Street on-ramp will begin in April 2000 and is being redesigned to minimize impact on H-1 traffic. The state will delete portions of this project that will interfere with H-1 resurfacing. These deleted portions will be upgraded at a later date.

Resurfaced 11th Avenue on-ramp in Kaimuki

SEISMIC RETROFITTING

(Lunalilo-Vineyard and Makiki off-ramps and Palama separation)

Estimated Start: Project is currently out to bid; estimated start Summer 2000

Estimated Completion: To be determined

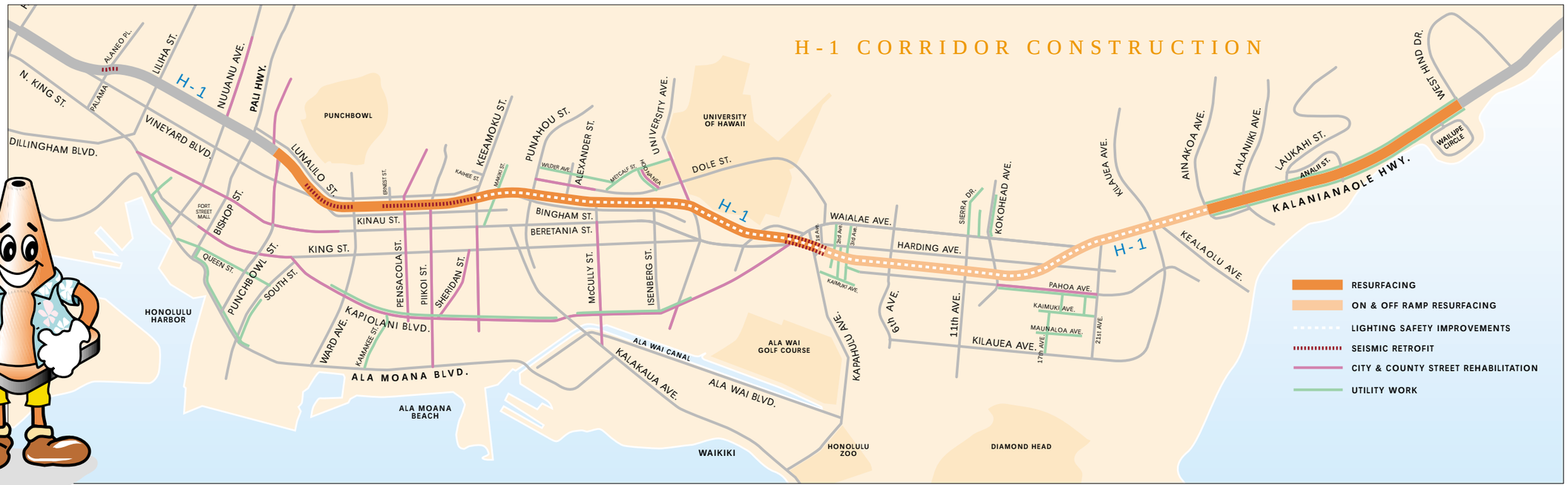
Seismic retrofitting will include the construction of cables/pipe restraining units to comply with new earthquake design standards, the addition of concrete blocking at the abutments and footings, and fiber wrapping of columns to prevent column bursting.

WAIALAE AVENUE LANDSCAPING

Estimated Start: Summer 2000

Estimated Completion: Spring 2001

Landscaping near Kahala Mall Shopping Center will include the replacement of an existing fence, installation of permanent irrigation and the addition of plants.



HELP MAKE WORK ZONES SAFER FOR EVERYONE

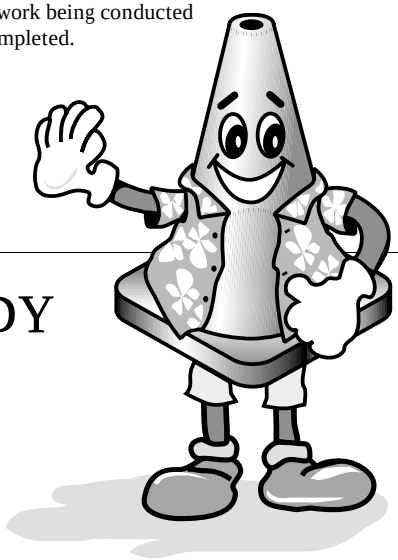
In the upcoming months, construction projects being conducted by the state Department of Transportation and the City and County of Honolulu will result in a large number of work zone areas throughout Oahu.

Work zones can be dangerous for both construction workers and motorists, and it is important for everyone to be aware of the potential dangers that exist.

In a recent Hawaii survey, it was found that one out of every six island residents knew of a family member or friend that was almost hit by a vehicle while they were working in a highway work zone.

To provide a safer working environment for construction workers and a safer driving environment for motorists, here are some things to remember:

◆ Just because workers are not visible does not mean they are not present in the work zone.
◆ Look in your newspaper for the most current construction areas and where to expect detours.
◆ Work zone areas are coned off according to federal guidelines that allow for the maximum protection of workers and motorists. In addition, other areas may be coned off to allow for sufficient concrete drying time.
◆ Expect traffic delays.
◆ Signs are posted in advance of construction projects to help motorists determine if an alternative route can be used to reach their destination.
◆ Speed limits posted in work zone areas can differ from normal speed limits and should be obeyed as workers may be near open lanes of traffic.
◆ Extra caution should be used when driving through work zone areas at night.
◆ Be aware that detours or lane closures may change daily as traffic patterns in work zones areas change according to the work being conducted and completed.



H-1 TO BE MADE EARTHQUAKE READY

Seismic retrofitting is the reinforcing of highway bridges and overpass structures, using specially designed hardware and engineering methods. It allows a structure to withstand much greater earthquake forces with less structural damage.

Drivers will see a number of seismic retrofitting projects along the H-1 freeway, as the state Department of Transportation moves to make Oahu's main traffic artery through Downtown Honolulu compliant with new federal construction standards. Much of the seismic retrofit work is performed beneath highway structures and will not effect traffic flow. However, the state will make it a priority to keep motorists informed of required highway closures and detours.

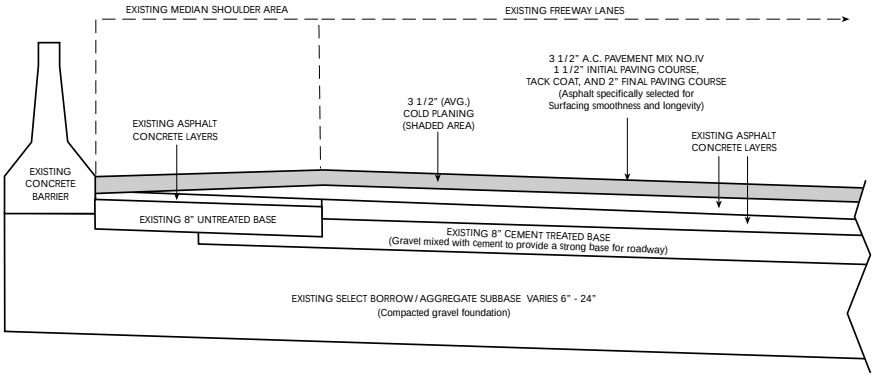
Seismic retrofitting projects on the H-1 Corridor are currently ongoing and expected to run through 2001. The work includes:

◆ Strengthening bridge or ramp supports by adding concrete to column footings or bases,
◆ Strengthening bridge or ramp supports by wrapping columns with fiber wrapping,
◆ Strengthening bridges or ramps by "tying" the superstructure internally with cables or pipes, and
◆ Strengthening abutments (where a bridge or ramp meets the ground) with concrete.

Retrofitting of the H-1 Kapiolani Interchange is currently more than 60 percent complete and is estimated to be finished by summer 2000. The state is currently retrofitting the H-1 bridge structure from South King Street to 1st Avenue. Structural work is being done over Kapiolani Boulevard, Harding and Kapahulu Avenues, and the Manoa-Palolo Stream. Lane closures on these respective roadways will be in place during construction to facilitate concrete pouring and construction over the roadways. Lane closures will also occur on H-1 during some portions of the work.

Retrofitting on the Lunalilo-Vineyard and Makiki off-ramps and Palama separation structure is currently out to bid and is estimated to start this summer. The construction of cables/pipe restraining units to comply with new earthquake design standards, the addition of concrete blocking at the abutments and footings, and fiber wrapping of columns will be among the work being completed.

H-1 RESURFACING AND WATER LINE INSTALLATION



Resurfacing of the H-1 is scheduled for June, and the contractor, Kiewit Pacific, Co., is currently developing the construction schedule. The areas to be resurfaced are on the H-1 from the Punchbowl Street off-ramp to Kapiolani Interchange, including all on- and off-ramps, frontage roads (roads running alongside H-1) and cross streets.

Prior to the start of resurfacing work, a water line on Bingham Street will be replaced. Water line work is being done prior to resurfacing to eliminate the need to resurface the roadway twice and to minimize the disruption of traffic.

Beginning April 10, daytime lane closures will be in effect on Bingham Street from 9 a.m. to 3 p.m. for installation of the water line. The contractor will start probing along Bingham Street, starting near Isenberg Street and working toward McCully Street. Probing will involve excavating small holes in the new waterline's planned alignment to examine the subsurface condition. This enables any necessary adjustments to be made in the waterline's alignment and installation.

Once probing is far enough ahead of the waterline installation on Bingham Street, the contractor will move to Lunalilo Street and start probing from Ernest Street toward Keeaumoku Street.

Beginning April 16, one lane on each side of H-1 will be closed from 9 p.m. to 5 a.m. to start the guardrail and parapet upgrades. The state will close one block at a time on Bingham Street throughout a five-month period. Local traffic will be allowed. Resurfacing will follow in June.

Water service will be maintained throughout construction, but there will be temporary outages during switch over from the old line to the new one. To minimize impacts to the residents, the new water line will be installed in phases. The exact schedule is being determined.

During water line installation, the contractor will excavate an open trench, approximately 4 to 5 feet wide and 5 to 7 feet deep into the existing road. The new water pipes will then be laid, and the open trench back-filled, compacted, and paved to match the adjacent pavements. The lane closure will be removed and the trench will be covered with steel plates to allow smooth traffic during non-work hours.

Concrete was used to resurface six on- and off-ramps in the Kaimuki area. When time allows, concrete is preferred for paving because it has a longer life before resurfacing is needed. However, concrete requires a much greater time to harden or "cure" than asphalt. The curing process for concrete usually takes several days, making 24-hour closures necessary. When repair is required, asphalt can be driven on within minutes after work is completed, unlike concrete, which takes approximately three days to cure. Utilizing concrete instead of asphalt to repave the entire H-1 Corridor would have extended the project by years. Asphalt is also less costly than concrete.

H-1 LIGHTING UPGRADE

From the Keeaumoku Street overpass to Ainakoa Avenue in Kahala, the replacement of the existing highway lighting system along the H-1 Corridor has begun. Existing galvanized light poles are being replaced with aluminum poles equipped with new high-pressure sodium lights.

Most lane closures will take place on the H-1 inbound and outbound lanes from 9 a.m. to 3 p.m., but the contractor will close lanes between Punchbowl and Punahou Streets from 9 p.m. to 5 a.m. for two weeks beginning April 2.

Work includes installation of new highway light pedestals, roadway trenching to install new conduits and wiring, asphalt concrete paving, and upgrading of metal guardrail. The cost for the H-1 lighting upgrade is $6,593,000. Work began last September and is about 40 percent completed. All lighting upgrade work on the H-1 is expected to be finished by June 2000.

The H-1 lighting poles are the original poles and have never been replaced. The upgrade is part of the state's regular maintenance schedule. Switching to the more durable aluminum poles, which weigh less than the galvanized ones, will make them easier and safer to service when future repairs or replacements are needed.

Work to be completed:

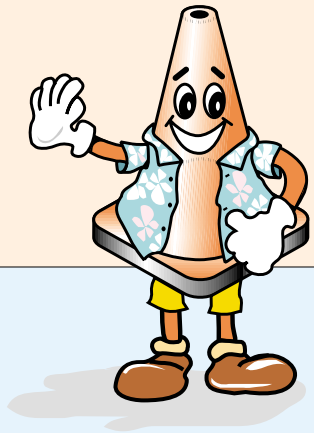
◆ Power new poles and remove existing poles at Waialae viaduct;

◆ Install electrical conduits and highway light poles at Punahou on-ramp;

◆ Install electrical conduits and highway light poles at Keeaumoku frontage road;

◆ Demolish concrete median barrier and install highway light poles along center median from Keeaumoku Street overpass to Old Waialae Road.

For more information contact the
Department of Transportation Public Affairs
office at 587-2160 or visit the
DOT website at: www.state.hi.us/dot



OTHER PROJECTS IMPACTING H-1 CORRIDOR CONSTRUCTION

Other projects that will impact H-1 corridor work in 2000 and 2001 include:

CITY AND COUNTY OF HONOLULU

- Punchbowl Street Improvements
  Vineyard Boulevard to H-1 Overpass (2/00 - 9/00)
  Miller Street to Beretania Street (2/00 - 8/00)
  Vineyard Boulevard to Miller Street (FY2000)
- Rehabilitation of University Avenue
  H-1 Off-Ramps to Maile Way (FY2000)
- Rehabilitation of Nuuanu Avenue, Dole Street & McCully Street
  Nuuanu Avenue, School Street to Judd Street; Dole Street, Punahou Street to Metcalf Street; McCully Street, Kalakaua Avenue to Beretania Street (5/00 - 5/01)
- Rehabilitation of King Street
  Bethel Street to South Street (5/00 - 6/01)
- Rehabilitation of Kapiolani Boulevard
  Increment 1: S. King Street to McCully Street; Increment 2: McCully Street to Pensacola Street; Increment 3: Pensacola Street to South Street
- Rehabilitation of Beretania and Piikoi Streets
  Beretania Street, King Street to Alapai Street; Piikoi Street, Ala Moana Boulevard to Lunalilo Street
- Rehabilitation of Hoonanea Street
  Metcalf Street to Dole Street
- Rehabilitation of Pahoa Avenue and Lusitana Street
  Pahoa Avenue, 22nd Avenue to Koko Head Avenue; Lusitana Street, School Street to Pauoa Road
- Traffic Calming Improvements at Various Locations
  Kaimuki Avenue/6th Avenue intersection improvements (complete 4/00)
- Rehabilitation of Keeaumoku Street
  Kapiolani Boulevard to Kinau Street
- Rehabilitation of Pensacola Street
  Nehoa Street to Waimanu Street
- Rehabilitation of Sheridan Street
  King Street to Kapiolani Boulevard
- Rehabilitation of University Avenue
  Kapiolani Boulevard to Hihiwai Street

SEWER

- Nimitz Reconstructed Sewer
  Ala Moana Boulevard, Keawe Street to Fort Street Mall; Fort Street Mall, Ala Moana Boulevard to Queen Street; Ala Moana Boulevard, Keawe Street to South Street; South Street, Ala Moana Boulevard to Queen Street; Queen Street, South Street to Nimitz Highway; Nimitz Highway, Queen Street to River Street; River Street, Nimitz Highway to Hotel Street (construction ongoing)
- Makiki Street Sewer Rehabilitation
  Beretania Street to Wilder Street (FY2001)
- Kapiolani Boulevard Sewerline
  Kapiolani Boulevard, Atkinson Drive to Kamakee Street; Kamakee Street, Kapiolani Boulevard to Ala Moana Boulevard (FY2001)

BOARD OF WATER SUPPLY

- Waialae Water System Improvements
  Install 8-inch main and appurtenances along Sierra Drive, Center Street and Koko Head Avenue (FY2000-2001, construction)
- Kaimuki Water System Improvements
  Install 8-inch mains and appurtenances along Maunaloa Avenue from 16th Avenue to 20th Avenue; Kaimuki Avenue from 16th Avenue to 21st Avenue; Pahoa Avenue from 18th Avenue to 150 feet beyond fire hydrant M-3591; 17th Avenue from Kilauea Avenue to Kaimuki Avenue; and 18th Avenue and 20th Avenue from Kaimuki Avenue to Pahoa Avenue (Design in FY2000-2001)
- Kapahulu Water System Improvements
  Install 8-inch mains and appurtenances along Kaimuki Avenue from 4th Avenue to Kapahulu Avenue; Lincoln Avenue from 3rd Avenue to Kapahulu Avenue; Pahoa Street from 4th Avenue to 3rd Avenue; 3rd Avenue from Kaimuki Avenue to H-1 and from H-1 to Waialae Avenue; Belser Street from Kaimuki Avenue to H-1 and from H-1 to Harding Avenue; and 2nd Avenue from Lincoln Avenue to fire hydrant M-1349 and from H-1 to Waialae Avenue; Aloalo Place from Harding Avenue to end (Design in FY2000-2001)
- Punahou Water System Improvements
  Install a 12-inch main along Wilder Avenue from Punahou Street to Metcalf Street; and 8-inch mains and appurtenances along Metcalf Street from Dole Street to University Avenue; and Hoonanea Street from Metcalf Street to Dole Street (Design in FY2000-2001)

HAWAIIAN ELECTRIC COMPANY, INC.

- Archer-Kewalo 138 KV Underground Transmission Line
  Construction schedule: Present to 12/02 (roadway portion - present to 2/00) Affected Areas: Kapiolani Boulevard from Chapin Lane to Kamakee Street with portions of Ward Avenue, Kamakee Street and Waimanu Street
- Kewalo-Kamoku 138 KV Underground Transmission Line
  Construction schedule: 2/00 to 12/02 (roadway portion - 2/00 to 1/01) Affected Areas: Kapiolani Boulevard from Hauoli Street to Date Street

GAS COMPANY

- Replace main gas line from Ainakoa Avenue to West Hind Drive